

CommunityManagementSystem

A Residential Community Management System designed to streamline daily operations for apartment complexes, including package tracking, announcements, facility reservations, parking management, payment processing, maintenance requests, and more. Co-developed by a team of six members.

Tech Stack

Front-end: Vue 3, Vite, Bootstrap 5, Pinia, JavaScript, JSPDF, JSbarcode

Back-end: Spring Boot, Spring Scheduler, JPA/Hibernate

Database: SQL Server

Tools & Environment: Git, GitHub, Ngrok, VS Code

Features

Package Management

Track incoming and outgoing packages.

Notify residents upon package arrival.

Announcements

Post community-wide announcements.

Support scheduling and expiration of notices.

Facility Reservation

Reserve facilities such as meeting rooms, gyms, and pool areas.

Prevent booking conflicts with real-time availability checks.

Parking Lot Management

Manage resident and visitor parking spaces.

Create lottery events, allow sign-ups, and randomly draw winners.

Track parking space availability.

Financial Management (Detailed)

Period & Fee Category Management – Define billing periods (e.g., monthly, quarterly) and categorize fees (e.g., management fee, garbage disposal fee).

Automated Billing – Using Spring Scheduler, the system automatically generates billing periods and invoices based on configured fee categories.

Invoice Workflow – Admins can review and approve invoices before sending them to residents.

Payment Tracking – Residents can view unpaid bills, make payments, and add payment notes.

Receipt Generation – Downloadable PDF receipts with barcodes for streamlined reconciliation and record-keeping.

Admin Reconciliation – Admins verify payment proof and update payment statuses accordingly.

Maintenance Requests

Residents can submit repair requests with descriptions and images.

Admins can track and update repair progress.

好家宅

The screenshot shows the WeChat mini-program interface for Hohashizi Real Estate. At the top, there is a large image of two modern residential buildings. Below the image, the text "智匯建設 你生活的新選擇" (Intelligent Construction, Your New Choice for Life) is displayed. A brief description follows: "在臺灣的今天，我們，創造「智匯」建築生活新選擇。數十年來從建築精緻家園，到各項生活服務，從居住到生活空間，到新生活方式..." (In today's Taiwan, we create a new choice for life with "Intelligent Construction". Over decades, from building elegant homes to various living services, from residence to living space, to new ways of life...). Below this, there are four navigation tabs: "系統特色" (System Features), "會員服務" (Member Services), "安生指南" (Safety Guide), and "管理員功能" (Administrator Functions). The main content area features a green box titled "用心築夢，共創" (With Care, We Build Dreams, Co-Creating) which contains text about intelligent construction and its benefits. Below this is a banner with the text "現代美學空間，品味生活新高度" (Modern aesthetic space, experiencing life at a new height) and a collage of interior and exterior shots of modern homes. Further down, there are sections for "熱門建案介紹" (Introduction to Hot Projects) showing thumbnails of various developments like "大里生態公園" (Taichung Ecological Park), "忠明智慧宅" (Chungming Intelligent Residential), "VM智慧公寓" (VM Intelligent Apartment), "碧海園洲" (Bihai Yuenzou), "帝富玉璽" (Difu Yuxi), and "茉莉苑" (Moli Yuan). At the bottom, there is a footer with contact information, a QR code, and social media links.

财务管理員專區

管理員操作教學

重要提示與注意事項

詳情操作教學

智能建設

好家宅

包裹管理 預約系統 業務資訊 報修服務 常見問題 車位管理 公告

你好，??? 0 pt 管理後台 登出

???
 safe@example.com 管理員

檔案 通知 設定 登出

功能選單 RiverBank社區 顯示詳細地圖

服務介紹 最新消息 聯絡我們

歡迎回到 RIVER BANK
好家宅社區管理，從此開始
整合住戶服務，提升生活品質與社區效率。完美社區的最佳首選 智匯建設

最新公告 → 查看全部

社區功能導覽

包裹管理 即時查詢與領取住戶包裹狀態，確保重要物品不遺漏。

停車場管理 掌握社區停車場使用狀況，並支援訪客申請與排程。

最新公告 快速接收社區重要通知與活動資訊，不再錯過任何消息。

常見問題 整理住戶最常遇到的問題與解答，操作流程一目瞭然。

公設預約 線上預約健身房、交誼廳等公設，點數管理。

報修單 設備損壞通報即時送達，快速安排維修處理。

緊急聯絡

大廳保全 02-1234-5678
維修專線 02-1234-5679
緊急救援 119

推薦服務

居家清潔 每周清潔服務 NT\$ 800/次
維修服務 24/7 快速維修 NT\$ 600/次
保全服務 全天候安全守護 NT\$ 1,200/月

好家宅

包裹管理 預約系統 業務資訊 報修服務 常見問題 車位管理 公告

???
 safe@example.com 管理員

檔案 通知 設定 登出

功能選單 RiverBank社區 顯示詳細地圖

服務介紹 最新消息 聯絡我們

財務管理區 快速查詢 - 費用與繳納查詢、獎勵計劃與社區貢獻記錄。

待繳帳單 物業尚未完成付費，請依此頁面選擇繳費方式。

繳費紀錄 查看过往繳費記錄與下次收據。

常見問題與支援 找不到想要的資訊嗎？點擊這裡尋求服務。

待繳帳單

#3 [要核中]

hu8hub (2025???)
單位數: 1 單價: NT\$ 600
截止日: 2025/7/9 下午9:00

選擇付款方式

線上刷卡

請點選下方「前往刷卡」按鈕，系統將導引您至由綠界科技提供的安全線上刷卡頁面。
請於 2025/7/9 下午9:05:00 前完成付款，以利管理員確認並寄發繳費提醒。

前往刷卡

總金額: NT\$ 600

請輸入住戶姓名/ID/期別/費用類型

住戶姓名 住戶ID

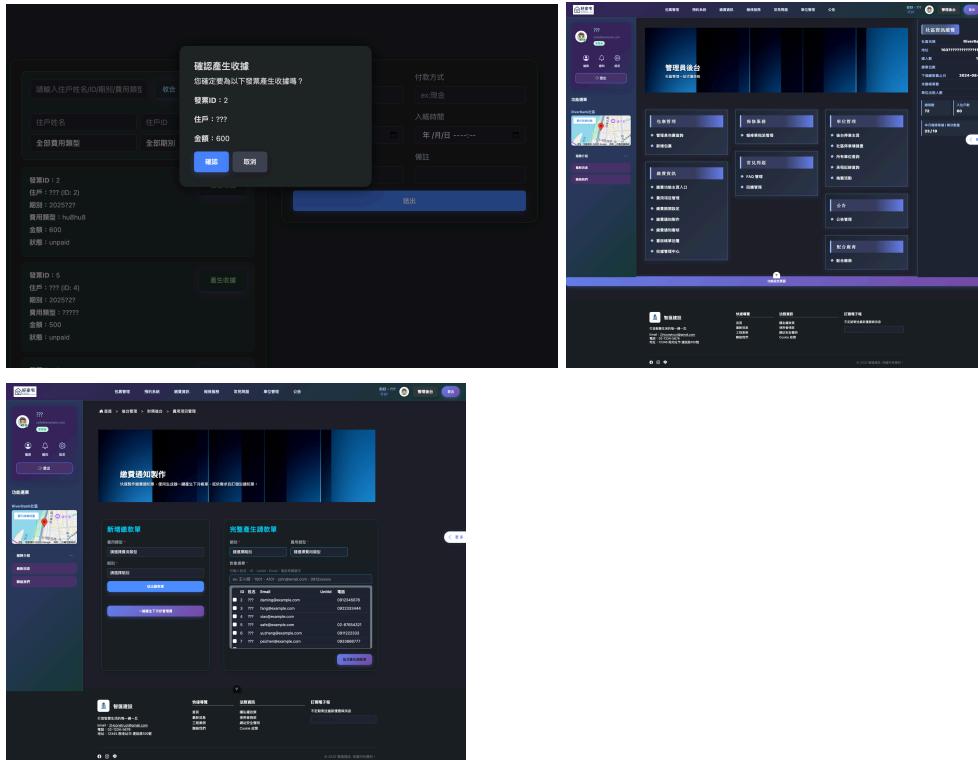
全部費用類型 全部期別

發票ID: 2
住戶: ??? (ID: 2)
期別: 2025???
費用類型: hu8hub
金額: 600
狀態: unpaid

產生收據

發票ID: 5
住戶: ??? (ID: 4)
期別: 2025???
費用類型: ??????
金額: 500
狀態: unpaid

產生收據



My Contributions

I was primarily responsible for designing and developing the financial and billing workflow, as well as several front-end UI components:

1. Period & Fee Category Management

Designed and implemented the "Period Definition" feature with Spring Scheduler to auto-generate billing cycles.

Created a "Fee Category" module allowing admins to define and manage different types of fees.

2. Invoice Workflow

Developed invoice generation based on selected fee categories and periods.

Implemented admin-side invoice review and approval before distribution.

3. Payment & Resident Interaction

Built resident-side interface to view outstanding bills and leave notes upon payment.

Developed PDF receipt download with integrated barcode for payment verification.

4. Admin Payment Verification

Implemented admin-side payment note review and reconciliation process.

5. Front-End UI & Shared Components

Designed and implemented main functional pages ensuring smooth back-end integration.

Built reusable Vue components (forms, tables, alerts, confirmation dialogs).

Designed dark mode for admin panel to improve usability during extended sessions.